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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/961,362  | 09/25/2001  | Dan Dan Yang         | 42041-0003          | 5924             |
| 7590  | 04/21/2005  |                      | EXAMINER            |                  |
| Cassan Maclean<br>Suite 401<br>80 Aberdeen Street<br>Ottawa, Ontario, K1S 5R5<br>CANADA |             |                      | PAYNE, DAVID C      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2633                |                  |

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                             |  |
|------------------------------|-------------------------------|-----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>09/961,362 | Applicant(s)<br>YANG ET AL. |  |
|                              | Examiner<br>David C. Payne    | Art Unit<br>2633            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.  
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 1-5 is/are allowed.  
 6) ☒ Claim(s) 6-21 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 6-21 have been considered but are moot in view of the new ground(s) of rejection.
2. Furthermore, the new prior art of Roberts is directly applicable to controlling optical parameters of optical devices. The secondary reference of Huddelston teaches modifying parameters of a system which includes optical components and is relied upon for the command sequence and structure information which would be obviously incorporated into any apparatus that uses hierarchy on controllers and command to control devices.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 6-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. US 2003/0058494 A1 (Roberts) in view of Huddleston et al. US 5,099,348 (Huddleston).

Regarding claims 6, 10, 12, 14, and 17 Roberts disclosed an optical network system having a global controller capable of controlling all the elements of the network. The controller receives performance data from each optical network element and calculates a performance value for each channel transmitting through the system. The controller then isolates the channel with the minimum performance value and tests possible changes in network element parameters to find a change that

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would increase this performance value. Once such a change is found, it is implemented and the system is re-optimized. The Roberts host controller (80 of Figure 1) controls the local controllers (100 of Figure 1) by sending an initial command message from said host to said sub-controller, said command message including a first command identifier indicating a command from said host to said sub-controller receiving said first command message at said sub-controller (page 5, ¶ 0120) implementing an action corresponding to said first command message based on said corresponding interpretation of said command identifier and formulating a proper response to said command identifier based on a result of said corresponding action; and sending a response message from said sub-controller to said host, said response message indicating a success or failure of said corresponding action (page 5, ¶s 0127-0146). Roberts does not disclose consulting a command database at said sub-controller to interpret said first command message, said database containing multiple possible valid command identifiers; each command identifier having a corresponding interpretation and action in said database based on a specific type of optical device connected to said sub-controller; at said sub-controller, wherein said sub-controller ignores subsequent command messages received prior to sending a response message responsive to the first command message. Huddleston disclosed consulting a command database at said sub-controller to interpret said first command message, said database containing multiple possible valid command identifiers, (e.g., Figure 7); each command identifier having a corresponding interpretation and action in said database based on a specific type of optical device connected to said sub-controller; at said sub-controller, (e.g., col./line: 21/60-67, 22/1-20). It would have been obvious to one of ordinary skill in the art at the time of invention to use a database to look up more than the two commands in the Roberts invention so that multiple devices could be accommodated by the command structure with varying command structures rather than hardwired functions allowing a more flexible architecture.

Regarding claims 15 and 16 the modified invention of Roberts and Huddleston disclosed wherein said first command message further includes addressing data indicating a portion of an

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optical subsystem controlled by said optical sub-controller to which the command is to be applied. (e.g., Roberts page 5, ¶s 0130).

Regarding claims 7 and 11 the modified invention of Roberts and Huddleston disclosed wherein entries in said database are used by said sub-controller to interpret said command identifier received from said host. (e.g., Huddleston col./line: 13/50-67).

Regarding claim 8, 13 and 18 the modified invention of Roberts and Huddleston disclosed wherein said database further contains multiple valid responses to be sent from said sub-controller to said host in response to said command identifiers. (e.g., Roberts page 5, ¶s 0140 - 0146).

Regarding claim 9 the modified invention of Roberts and Huddleston disclosed wherein each command identifier defines a format of data following said identifier in a message or response sent between said host and said sub-controller (e.g., Roberts page 5, ¶s 0140 - 0146).

Regarding claims 19-21 Huddleston disclosed wherein at least one command identifier in said set sets an alarm threshold for said at least one reconfigurable optical device, said alarm threshold determining when said at least one reconfigurable optical device exceeds acceptable operating limits. (e.g., Roberts page 5, ¶ 0319).

#### ***Conclusion***

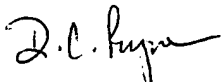
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp



David C. Payne  
Patent Examiner  
AU 2633